

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES
			1 of 3	
2. AMENDMENT/MODIFICATION NO. <div style="text-align: center;">4</div>	3. EFFECTIVE DATE <div style="text-align: center;">3-Jun-2003</div>	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. <i>(If applicable)</i>	
6. ISSUED BY US Army Corps of Engineers, Kansas City District 760 Federal Building, 601 East 12th Street Kansas City, Missouri 64106-2896		7. ADMINISTERED BY <i>(If other than item 6)</i>		
8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>		(X) 9a. AMENDMENT OF SOLICITATION NO. X DACA41-03-B-0002 9b. DATED <i>(SEE ITEM 11)</i> 4/28/2003 10a. MODIFICATION OF CONTRACT/ORDER NO. 10b. DATED <i>(SEE ITEM 13)</i>		
CODE FACILITY CODE				

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above number solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning one copy of the amendment. (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegraph which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO:	THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBER CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i>	SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF:
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:	
	D. OTHER <i>(Specify type of modification and authority)</i>	

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Access Control Facilities
Fort Leonard Wood, Missouri

The Solicitation is amended in accordance with the attached pages.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>	16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ <i>(Signature of person authorized to sign)</i>		BY _____ <i>(Signature of Contracting Officer)</i>	

The SOLICITATION is amended as follows:

1. SPECIFICATIONS:

- a. Revised Pages: The following pages are deleted and replaced with revised pages of the same numbers. Copies of the revised pages are attached. Changes have been emphasized by underlines.

07600A-6

09915-2

Hardware Schedule – 2

Hardware Schedule – 3

- b. Revised Section: Section 07412A NON-STRUCTURAL METAL ROOFING is deleted and replaced with a revised section of the same number. A copy of the revised section is attached. Deleted text is identified by * ___ * and new text is emphasized by underlines.
- c. Narrative Change: The door hardware for all ballistic rated doors shall be as indicated in the Door Hardware Schedule. Furthermore, the door hardware shall incorporate required accessories (cover plates) as indicated/or required under Specification SECTION 11035 BULLET-RESISTANT COMPONENTS, in order to meet the Ballistic Level 3 rating. Contractor shall coordinate requirements.

2. DRAWINGS

- a. Volume 1 - North Gate, Sheets A312, A313, A510, A514, A321, and Volume 2 - South and East Gates, Sheet A381: Keynotes, Section "07416 – Architectural (ASSMR) System": Disregard referenced Section "07416 – Architectural (ASSMR) System," and revise to read: Section 07412A – Non-Structural Metal Roofing.

- b. Volume 1 – North Gate, Sheet AS501, Monumental Sign:

Disregard the single joint shown on the monumental sign. The monumental granite sign can be furnished in three pieces, with two horizontal straight joints. One of the joints must be located at the center of the "Fort Leonard Wood" lettering. Both joints must incorporate an upward oriented tongue-and-groove joint connection for proper alignment and water drainage. It is the signage company's responsibility to design and provide proper and adequate structural support for the sign. Indicated structural members are still a minimum requirement.

- c. Volume 1 – North Gate, Monitoring Building:

Sheet A620, Door 101. Disregard indicated hollow metal frame.
Both the door and the frame shall be aluminum.

Furthermore, and in accordance with the "Ballistic Level 3 Rating" notes, the door is to be a security Ballistic Level 3 rated door. The door, the frame, and the glazing are to meet the requirements of Specification Section 11035 - Bullet-Resistant Components.

d. Volume 1 – North Gate, Monitoring Building:

Sheet A522, Details 1 through 3. The given details show a Ballistic Level 3 aluminum door and frame with the proper Ballistic Level 3 steel protection shields/plates within the aluminum extrusions.

Disregard indicated "Aluminum Clad" panels. Door requires Ballistic Level 3 rated glazing. A new Detail 4 has been added for clarity. New details are included in this Amendment.

e. Volume 2 – South and East Gates:

Sheet A680, Doors 101A and 101B. Disregard indicated aluminum frames. Both the doors and the frames shall be hollow metal.

Furthermore, and in accordance with the "Ballistic Level 3 Rating" notes, the doors are to be a security Ballistic Level 3 rated doors. The doors, the frames, and the glazing are to meet the requirements of Specification Section 11035 - Bullet-Resistant Components.

f. Volume 2 – South and East Gates:

Sheet A582, Details 1 through 3. Disregard indicated Ballistic Level 3 rated aluminum door and frame details. New details showing the hollow metal door and frame have been developed and included in this amendment.

g. Volume 2 – South and East Gates:

Sheet A680, Doors 104 and 105. Both the doors and the frames are to be hollow metal. In accordance with the "Ballistic Level 3 Rating" notes, the doors are to be security Ballistic Level 3 rated doors.

h. Volume 2 – South and East Gates:

Sheet A582, Details 1 through 3. Disregard indicated Ballistic Level 3 rated aluminum door and frame details. New details showing a hollow metal door, frame, and glazing have been developed and included in this Amendment.

i. Volume 1 – North Gate, Visitor's Center/Guard Administration Building, Roofing System, Sheet A510:

Disregard previously issued Roof Details 1, 2, and 4.

The roof system is as follows: Architectural standing seam roof panels with concealed clips and fasteners, over a rubberized underlayment, over plywood roof sheathing, over roof metal deck, with rigid board Insulation on the underside of the metal deck.

See new Details in this Amendment.

j. Volume 1 – North Gate, Monitoring Building, Sheet A521:

Disregard previously issued Eave Detail No. 3.

The roof system is as follows: Architectural standing seam roof panels with concealed clips and fasteners, over a rubberized underlayment, over bullet-resistant fiberglass panels, over plywood roof sheathing. Blanket insulation is to be installed at the bottom of the roof trusses. See new Detail in this Amendment.

k. Volume 2 – South and East Gats, Roofing System

Disregard previously issued Eave/Roof Detail 3, on Sheet A581.

The roof system and eave detail shall be the same as with the Monitoring Building identified under item A4-D10 of this Amendment.

l. Volume 1 – North Gate, Canopies:

Disregard previously issued Details 1 and 2, on Sheet A550.

New Details 1 and 2 are included in this Amendment.

m. Volume 2 – South and East Gates, Canopies:

Disregard previously issued Details 1 and 2, on Sheet A590.

New Details 1 and 2 are the same as indicated under item A4-D12 of this Amendment.

n. Volume 1 – North Gate, Canopies:

Disregard previously issued Detail 1, on Sheet A530.

New Detail 1 is included in this Amendment.

o. Volume 1 – North Gate, Canopies:

Disregard previously issued Detail 4, on Sheet A570.

New Detail 4 is included in this Amendment.

p. Volume 1 – North Gate, Sheet A313, Detail 1, Lockers:

The lockers are to be 60 inches tall with a 30-degree sloping cover plate. Detail is enclosed in this Amendment.

q. Volume 1 - North Gate, Visitor's Center, Sheet A212, Detail 6:

Disregard indicated cross-referenced Detail Section 11 on A513.

The countertop at this location is 24 inches deep, and underneath there is a removable fixed panel and front to match Detail 7 on A513. No doors are required. The panels must not be easily removed, but only through the use of a special tool or a concealed locking device.

r. New and revised details are attached as Details 1 of 8 thru 8 of 8.

3. For convenience, on the revised Specification pages, essential changes have been emphasized as indicated above. However, all portions of the revised Specification pages shall apply whether or not changes have been indicated.

4. Bidders are required to acknowledge receipt of this amendment on the Bidding Form, in the space provided, or by separate letter or telegram prior to opening of bids. Failure to acknowledge all amendments may cause rejection of the bid.

5. Bids will be received until 2:00 p.m., local time, 12 June 2003, in Room 748 Federal Building, 601 E. 12th Street, Kansas City, Missouri 64106-2896, and at that time publicly opened. Points of Contact are as follows:

Contract Specialist:	Earl Smith	816-983-3846
Project Manager:	Clif Rope	816-983-3476

Metal base flashing shall be coordinated with roofing work. Metal base flashing shall be set in plastic bituminous cement over the roofing membrane, nailed to nailing strip, and secured in place on the roof side with nails spaced not more than 3 inches on centers.

3.7.2 Counter Flashings

Except as otherwise indicated, counter flashings shall be provided over base flashings. Counter flashing shall be installed as shown in SMACNA Arch. Manual. Where bituminous base flashings are provided, the counter flashing shall extend down as close as practicable to the top of the cant strip. Counter flashing shall be factory formed to provide spring action against the base flashing.

3.7.4 Through-Wall Flashing

Through-wall flashing includes sill, lintel, and spandrel flashing. The flashing shall be laid with a layer of mortar above and below the flashing so that the total thickness of the two layers of the mortar and flashing are the same thickness as the regular mortar joints. Flashing shall not extend further into the masonry backup wall than the first mortar joint. Joints in flashing shall be lapped and sealed. Flashing shall be one piece for lintels and sills.

3.7.4.1 Lintel Flashing

Lintel flashing shall extend the full length of lintel. Flashing shall extend through the wall one masonry course above the lintels and shall be bent down over the vertical leg of the outer steel lintel angle not less than 2 inches, or shall be applied over top of masonry and precast concrete lintels. Bedjoints of lintels at control joints shall be underlaid with sheet metal bond breaker.

3.7.4.2 Sill Flashing

Sill flashing shall extend the full width of the sill and not less than 4 inches beyond ends of sill except at control joint where the flashing shall be terminated at the end of the sill.

3.7.5 Valley Flashing

Valley flashing shall be installed as specified in SMACNA Arch. Manual and as indicated.

3.8 FASCIA

All fascias shall be furnished by the Standing Seam Metal Roofing Supplier and shall comply with the requirements of Specification Section 07412A.

3.9 INSTALLATION OF LOUVERS

Louvers shall be rigidly attached to the supporting construction. The installation shall be rain-tight. Louver screen shall be installed as indicated.

3.10 REGLETS

Reglets shall be a factory fabricated product of proven design, complete with fittings and special shapes as required. Open-type reglets shall be

2.2 COLOR SCHEDULE

The color schedule lists the colors, patterns and textures required for exterior and interior finishes, including both factory applied and field applied colors.

2.2.1 Exterior Walls

Exterior wall colors shall apply to exterior wall surfaces including recesses at entrances and projecting vestibules. Conduit shall be painted to closely match the adjacent surface color. Wall color shall be provided to match the colors listed below.

- 2.2.1.1 Brick:
As manufactured by Eureka Blend 240 Modular Velour Crimson.
- 2.2.1.2 Mortar:
Color to match adjacent masonry
- 2.2.1.3 Integrally Colored/Split-Faced Concrete Masonry Units:
Trendwyth Industries, Inc. Natural MW.
- 2.2.1.4 Integrally Colored Cast Stone:
Architectural Cast Stone, Mesa Buff.
- 2.2.1.5 Paint:
Federal Color No. 10080.
- 2.2.1.6 Hardware and Associated Trim for Aluminum Doors:
Dark bronze.
- 2.2.1.7 Glass and Glazing:
Visitor's Center: Bronze Tint.
Guard Monitoring: Solar Bronze Reflective.
Guard Booths: Bronze Tint.
Guard Shelters: Bronze Tint.
Gate Houses: Bronze Tint.

2.2.2 Exterior Trim

Exterior trim shall be provided to match the colors listed below.

- 2.2.2.1 Steel Doors and Door Frames:
Federal Color No. 10080.
- 2.2.2.2 Windows (mullion, muntin, sash, trim, and sill):
Dark bronze.
- 2.2.2.3 Aluminum Doors and Door Frames:
Dark Bronze.
- 2.2.2.4 Fascia:
Dark bronze (to match Standing Seam Roof Color).
- 2.2.2.5 Soffits and Ceilings:
Visitor's Center: Dark Bronze to match Standing Seam Roof Color.
Guard Monitoring: Dark Bronze to match Standing Seam Roof Color.
Guard Booths: Dark Bronze to match Standing Seam Roof Color.
Guard Shelters: Dark Bronze to match Standing Seam Roof Color.

HEADING V-04

SINGLE DOOR 120A
TO HAVE:

3 HINGES	BB1199 - 32D 4 1/2 x 4 1/2 NRP	HAGER
1 EXIT DEVICE	<u>ED5200 - T1357 - 630 x M52</u>	CORBIN/RUSSWIN
1 <u>CYLINDER</u>	<u>1E72-626</u>	BEST
1 <u>DOOR CLOSER</u>	<u>CLP7500-689</u>	<u>NORTON</u>
1 <u>DOOR BOTTOM</u>	<u>101VA - 36"</u>	<u>NATIONAL GUARD</u>
1 <u>THRESHOLD</u>	<u>425 - 36"</u>	<u>NATIONAL GUARD</u>
1 <u>SET WEATHERSTRIPPING</u>	<u>155V (HEAD AND JAMBS)</u>	<u>NATIONAL GUARD</u>

NOTE: DOOR BOTTOM AND WEATHERSTRIPPING BY ALUMINUM DOOR SUPPLIER

HEADING V-05

PAIR DOORS 104A
TO HAVE:

6 HINGES	BB1199 - 32D 4 1/2 x 4 1/2 NRP	HAGER
2 FLUSH BOLTS	555 - 26D - 12"	ROCKWOOD
1 LOCKSET	93K - 7D - 15D - 626	BEST
2 DOOR CLOSERS	CLP7500 - 689	NORTON
2 KICK PLATES	.050 - 32D 10" x 2" LDW	ROCKWOOD
1 THRESHOLD	425 - 72"	NATIONAL GUARD
2 DOOR BOTTOMS	101VA - 36"	NATIONAL GUARD
1 GASKETING	5050C - 7'	NATIONAL GUARD
1 SET WEATHERSTRIPPING	155V (HEAD AND JAMBS)	NATIONAL GUARD

NOTE: A) ASTRAGAL BY HOLLOW METAL DOOR SUPPLIER
B) APPLY GASKETING TO FACE OF ASTRAGAL

HEADING V-06

SINGLE DOOR 103A
TO HAVE:

3 HINGES	BB1199 - 32D 4 1/2 x 4 1/2 NRP	HAGER
1 LOCKSET	93K - 7D - 15D - 626	BEST
1 DOOR CLOSER	CLP7500 - 689	NORTON
1 THRESHOLD	425 - 36"	NATIONAL GUARD
1 DOOR BOTTOM	101VA - 36"	NATIONAL GUARD
1 SET WEATHERSTRIPPING	155V (HEAD AND JAMBS)	NATIONAL GUARD

HEADING V-07

SINGLE DOOR 125A
TO HAVE:

3 HINGES	BB1199 - 32D 4 1/2 x 4 1/2 NRP	HAGER
1 <u>EXIT DEVICE/ALARM</u>	<u>ED5200 - 630 X M61</u>	CORBIN/RUSSWIN
1 MORTISE CYLINDER	<u>1E74 - 626</u>	BEST
1 DOOR CLOSER	<u>CLP7500 - 689</u>	NORTON
1 <u>DOOR BOTTOM</u>	<u>101VA - 36"</u>	<u>NATIONAL GUARD</u>
1 THRESHOLD	425 - 36"	NATIONAL GUARD
1 <u>SET WEATHERSTRIPPING</u>	<u>155V (HEAD AND JAMBS)</u>	<u>NATIONAL GUARD</u>

NOTE: DOOR BOTTOM AND WEATHERSTRIPPING BY ALUMINUM DOOR SUPPLIER

HEADING V-08

PAIR DOORS 113A
TO HAVE:

6 HINGES	BB1168 - 26D 4 1/2 x 4 1/2 NRP	HAGER
2 EXIT DEVICES	ED5400 - N955 - 630 x M55	CORBIN/RUSSWIN
2 RIM CYLINDERS	1E72 - 626 x RP	BEST
2 DOOR CLOSERS	PR7500 - 689	NORTON
2 KICK PLATES	.050 - 32D 10" x 2" LDW	ROCKWOOD
2 WALL STOP	409 - 32D	ROCKWOOD
2 DOOR SILENCERS	608	ROCKWOOD

HEADING V-09

SINGLE DOORS 118A, 118B
TO HAVE:

3 HINGES	BB1279 - 26D 4 1/2 x 4 1/2 NRP	HAGER
1 LOCKSET	93K - 7D - 15D - 626	BEST
1 ELECTRIC STRIKE	7002 - 24D - 630	H.E.S.
1 CARD READER *	ProxPro Reader	HID CORPORATION
1 DOOR CLOSER	PR7500 - 689	NORTON
1 KICK PLATE	.050 - 32D 10" x 2" LDW	ROCKWOOD
1 POWER SUPPLY	505	LOCKNETICS
1 WALL STOP	409 - 32D	ROCKWOOD
3 DOOR SILENCERS	608	ROCKWOOD

* CARD READER SHALL BE FURNISHED BY THE SECURITY EQUIPMENT SUPPLIER AS
SPECIFIED UNDER SECTION 16751A - IES SYSTEM

HEADING V-10

SINGLE DOOR 126A
TO HAVE:

3 HINGES	BB1199 - 32D 4 1/2 x 4 1/2	HAGER
1 PUSH/PULL	BF15747 - 32D x 33" CTC	ROCKWOOD
1 DOOR CLOSER	PR7500 - 689 x 7786	NORTON
1 WALL STOP	409 - 32D	ROCKWOOD

SECTION 07412A

NON-STRUCTURAL METAL ROOFING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A 653/A 653M	(2001a) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A 792/A 792M	(1999) Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
ASTM C 518	(1998) Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
ASTM C 612	(2000) Mineral Fiber Block and Board Thermal Insulation
ASTM C 991	(1998) Flexible Glass Fiber Insulation for Pre-Engineered Metal Buildings
ASTM C 1177/C 1177M	(1999) Glass Mat Gypsum Substrate for Use as Sheathing
ASTM C 1289	(2001) Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
ASTM D 226	(1997a) Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
ASTM D 522	(1993a) Mandrel Bend Test of Attached Organic Coatings
ASTM D 523	(1999) Standard Test Method for Specular Gloss
ASTM D 610	(1995) Evaluating Degree of Rusting on Painted Steel Surfaces
ASTM D 714	(1987; R 1994e1) Evaluating Degree of Blistering of Paints

ASTM D 968	(1993) Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D 1308	(1987; R 1998) Effect of Household Chemicals on Clear and Pigmented Organic Finishes
ASTM D 1654	(1992) Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
ASTM D 2244	(1995) Calculation of Color Differences from Instrumentally Measured Color Coordinates
ASTM D 2247	(1999) Testing Water Resistance of Coatings in 100% Relative Humidity
ASTM D 2794	(1993; R 1999e1) Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
ASTM D 3359	(1997) Measuring Adhesion by Tape Test
ASTM D 4214	(1998) Evaluating Degree of Chalking of Exterior Paint Films
ASTM D 4397	(1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
ASTM D 5894	(1996) Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal, (Alternating Exposures in a Fog/Dry Cabinet and a UV/Condensation Cabinet)
ASTM E 84	(2001) Surface Burning Characteristics of Building Materials
ASTM E 96	(2000) Water Vapor Transmission of Materials
ASTM G 154	(2000a e1) Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials

UNDERWRITERS LABORATORIES (UL)

UL 580	(1994; Rev thru Feb 1998) Tests for Uplift Resistance of Roof Assemblies
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1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Metal Roofing; G, AE

a. Drawings consisting of catalog cuts, flashing details, erection drawings, shop coating and finishing specifications, and other data as necessary to clearly describe materials, sizes, layouts, construction details, fasteners, and erection of metal roofing, fascia, and soffit panels and related support systems. Drawings shall be provided by the metal roofing manufacturer.

b. Drawings showing the UL 580, Class 90 tested roof system assembly.

SD-04 Samples

Accessories; G

One sample of each type of flashing, trim, fascia, closure, cap and similar items. Size shall be sufficient to show construction and configuration.

Roof Panels; G, AE

Fascia Panels; G, AE

Soffit Panels; G, AE

One piece of each type and finish to be used, 9 inches long, full width.

Fasteners; G

Two samples of each type to be used with statement regarding intended use. If so requested, random samples of screws, bolts, nuts, and washers as delivered to the jobsite shall be taken in the presence of the Contracting Officer and provided to the Contracting Officer for testing to establish compliance with specified requirements.

Gaskets and Insulating Compounds; G

Two samples of each type to be used and descriptive data.

Sealant; G

One sample, approximately 1 pound, and descriptive data.

SD-07 Certificates

Roof Panels
Installation

Accessories

Certificates attesting that the panels and accessories conform to the specified requirements. Certificate for the roof assembly shall certify that the assembly complies with the material and fabrication requirements specified and is suitable for the installation at the indicated design slope. Certified laboratory test reports showing that the sheets to be furnished are produced under a continuing quality control program and that at least 3 representative samples of similar material to that which will be provided on this Project have been previously tested and have met the quality standards specified for factory color finish.

Insulation

Certificate attesting that the polyisocyanurate insulation furnished for the Project contains recovered material, and showing an estimated percent of such recovered material.

Installer

Certification of installer.

Warranties

At the completion of the Project, signed copies of the 5-year Warranty for Non-Structural Metal Roofing System, a sample copy of which is attached to this section, and the 20-year Manufacturer's Material and Weathertightness Warranties.

1.3 GENERAL REQUIREMENTS

The Contractor shall furnish a commercially available roofing system which satisfies the specified design and additional requirements contained herein. The roofing system shall be provided by the Contractor as a complete system, as tested and approved in accordance with UL 580. Roof panels, components, transitions, accessories, and assemblies shall be supplied by the same roofing system manufacturer.

1.3.1 Non-Structural Metal Roof System

The Non-Structural Metal Roof System covered under this Specification shall include the entire metal roofing system; the metal roof panels, fascia panels, soffit panels, fasteners, connectors, roof securement components, and assemblies tested and approved in accordance with UL 580. The system shall be installed on a substrate specified in Section 05300a * * and 06100A. In addition, the system shall consist of panel finishes, * *, rubberized underlayment, insulation, vapor retarder, all accessories, components, and trim and all connections with roof panels. This includes roof penetration items such as vents, curbs, skylights; interior or exterior gutters and downspouts, eaves, ridge, hip, valley, rake, gable, wall, or other roof system flashings installed and any other components specified within this contract to provide a weathertight roof system; and items specified in other sections of the Specifications that are part of the system.

1.3.2 Manufacturer

The non-structural metal roofing system shall be the product of a manufacturer who has been in the practice of manufacturing metal roofs for a period of not less than 3 years and has been involved in at least five

projects similar in size and complexity to this Project.

1.3.3 Installer

The installer shall be certified by the metal roof manufacturer to have experience in installing at least three projects that are of comparable size, scope and complexity as this Project for the particular roof system furnished. The installer may be either employed by the manufacturer or be an independent installer.

1.4 DESIGN LOADS

Non-structural Metal Roof System assemblies shall be tested as defined in UL 580 and shall be capable of resisting the wind uplift pressures shown on the contract drawings or, as a minimum, shall be approved to resist wind uplift pressures of UL 580, Class 90.

1.5 PERFORMANCE REQUIREMENTS

The metal roofing system supplied shall conform to the roof slope, the underlayment, and uplift pressures shown on the contract drawings. The Contractor shall furnish a commercially available roofing system which satisfies all the specified requirements.

1.6 DELIVERY AND STORAGE

Materials shall be delivered to the site in a dry and undamaged condition and stored out of contact with the ground. Materials shall be covered with weather tight coverings and kept dry. Material shall not be covered with plastic where such covering will allow sweating and condensation. Plastic may be used as tenting with air circulation allowed. Storage conditions shall provide good air circulation and protection from surface staining.

1.7 WARRANTIES

The Non-Structural Metal Roofing System shall be warranted as outlined below. Any emergency temporary repairs conducted by the owner shall not negate the warranties.

1.7.1 Contractor's Weathertightness Warranty

The Non-Structural Metal Roofing System shall be warranted by the Contractor on a no penal sum basis for a period of five years against material and workmanship deficiencies; system deterioration caused by exposure to the elements and/or inadequate resistance to specified service design loads, water leaks, and wind uplift damage. The roofing covered under this warranty shall include the entire roofing system, including but not limited to, the roof panels, fascia panels, soffit panels, fasteners, connectors, roof securement components, and assemblies tested and approved in accordance with UL 580. In addition, the system shall consist of panel finishes, * *, rubberized underlayment, insulation, vapor retarder, all accessories, components, and trim and all connections with roof panels. This includes roof penetration items such as vents, curbs, skylights; interior or exterior gutters and downspouts; eaves, ridge, hip, valley, rake, gable, wall, or other roof system flashings installed and any other components specified within this contract to provide a weathertight roof system; and items specified in other sections of the Specifications that are part of the roof system. All material and workmanship deficiencies,

system deterioration caused by exposure to the elements and/or inadequate resistance to service design loads, water leaks and wind uplift damage shall be repaired as approved by the Contracting Officer. See the attached Contractor's required warranty for issue resolution of warrantable defects. This warranty shall warrant and cover the entire cost of repair or replacement, including all material, labor, and related markups. The Contractor shall supplement this warranty with written warranties from the installer and system manufacturer, which shall be submitted along with Contractor's warranty; however, the Contractor shall be ultimately responsible for this warranty. The Contractor's written warranty shall be as outlined in attached WARRANTY FOR NON-STRUCTURAL METAL ROOF SYSTEM, and shall start upon final acceptance of the facility. It is required that the Contractor provide a separate bond in an amount equal to the installed total roofing system cost in favor of the owner (Government) covering the Contractor's warranty responsibilities effective throughout the 5 year Contractor's warranty period for the entire roofing system as outlined above.

1.7.2 Manufacturer's Material Warranties

The Contractor shall furnish, in writing, the following manufacturer's material warranties which cover all Non-Structural Metal Roofing System components such as roof panels, fascia panels, soffit panels, flashing, accessories, and trim, fabricated from coil material:

a. A manufacturer's 20 year material warranty warranting that the zinc-coated steel or aluminum-zinc alloy coated steel specified herein will not rupture, fail structurally, or perforate under normal atmospheric conditions at the site. Liability under this warranty shall be limited exclusively to the cost of either repairing or replacing nonconforming, ruptured, perforated, or structurally failed coil material.

b. A manufacturer's 20 year exterior material finish warranty warranting that the factory color finish, under normal atmospheric conditions at the site, will not crack, peel, or delaminate; chalk in excess of a numerical rating of 8 when measured in accordance with ASTM D 4214; or fade or change colors in excess of 5 NBS units as measured in accordance with ASTM D 2244. Liability under this warranty is exclusively limited to refinishing or replacing the defective coated coil material.

c. A roofing system manufacturer's 20 year system weathertightness warranty.

1.8 COORDINATION MEETING

A coordination meeting shall be held within 45 days after contract award for mutual understanding of the metal roofing system contract requirements.

This meeting shall take place at the building site and shall include representatives from the Contractor, the roofing system manufacturer, the roofing supplier, the erector, the designer, and the Contracting Officer. All items required by paragraph SUBMITTALS shall be discussed, including applicable standard manufacturer shop drawings, and the approval process. The Contractor shall coordinate time and arrangements for the meeting.

PART 2 PRODUCTS

2.1 ROOF PANELS, FASCIA PANELS, and SOFFIT PANELS

Roof Panels shall be steel and shall have a factory color finish. Length of sheets shall be sufficient to cover the entire length of any unbroken roof slope for slope lengths that do not exceed 30 feet. Sheets longer than 30 feet may be furnished if approved by the Contracting Officer. Width of sheets shall provide nominal 12 to 16 inches maximum of coverage in place, as standard with the Manufacturer. All roofing panels, for all buildings and canopies in this Project, shall be of the same width, and panel design.

Design provisions shall be made for thermal expansion and contraction consistent with the type of system to be used. The fixed attachment point of the roof panels is at the ridge locations or the high end of the canopies. All sheets shall be either square-cut or miter-cut. The ridge cap shall be installed as recommended by the metal roofing manufacturer. Height of corrugations, ribs, or seams, at overlap of adjacent roof sheets shall be the building manufacturer's standard for the indicated roof slope. Roof Panels shall be attached to the substrate with a concealed fastener system. The furnished details on the drawings are only for graphic representation of the intended system and do not depict a specific product or manufacturer. Any type of a standing seam panel with concealed fasteners, and of design that is a standard product by any manufacturer, and that is of the specified materials, meets the performance criteria, and carries the indicated warranties, is acceptable for incorporation on this Project.

Fascia Panels shall be steel, with a smooth face, and a concealed fastening system. Fascia Panels shall have a factory color finish that has the same performance characteristics, color, and carries the same warranty as with the Roof Panels. Fascia Panels shall be 12 inches wide, and shall incorporate concealed side ribs of interlocking design and size as required for the specific installation. Provisions shall be made for accommodating thermal expansion and contraction consistent with the type of system used. All sheets shall be square-cut or miter-cut. Fascia Panels support system and trim shall be installed as recommended by the metal roofing manufacturer for the intended application.

Soffit Panels shall be steel, shall have a factory color finish, and be both solid and factory perforated for ventilation. Solid Panels shall be used at all canopy locations, perforated Panels shall be used at all other building locations. Width of sheets shall provide nominal 12 inches of coverage in place, unless otherwise indicated on drawings. Design provisions shall be made for interlocking joints between panels and thermal expansion and contraction consistent with the type of system to be used. All sheets shall be either square-cut or miter-cut. Panels, support and trim shall be installed as recommended by the metal roofing manufacturer.

2.1.1 Steel Panels

Zinc-coated steel conforming to ASTM A 653/A 653M or aluminum-zinc alloy coated steel conforming to ASTM A 792/A 792M, AZ 50 coating. Uncoated roof panels shall be 0.024 inch thick minimum. Panels shall be within 95 percent of the nominal thickness. * *.

2.2 ACCESSORIES

Accessories shall be compatible with the roofing furnished. Flashing, trim, metal closure strips, caps, and similar metal accessories shall be not less than the minimum thicknesses specified for roof panels. Exposed metal accessories shall be finished to match the panels furnished. Molded closure strips shall be bituminous-saturated fiber, closed-cell or solid-cell

synthetic rubber or neoprene, or polyvinyl chloride premolded to match configuration of the panels and shall not absorb or retain water.

2.3 FASTENERS

Fasteners for roof panels shall be zinc-coated steel, stainless steel, or nylon capped steel, type and size as recommended by the manufacturer to meet the performance requirements. Fasteners for accessories shall be the manufacturer's standard. Exposed roof fasteners shall be gasketed or have gasketed washers on the exterior side of the roofing to waterproof the fastener penetration. Washer material shall be compatible with the panels; and gasketed portion of fasteners or washers shall be neoprene or other equally durable elastomeric material approximately 1/8 inch thick.

2.4 FACTORY COLOR FINISH

Panels shall have a factory applied polyvinylidene fluoride finish on the exposed side. The exterior finish shall consist of a baked-on topcoat with an appropriate prime coat. Color shall match the color indicated in Section 09915 COLOR SCHEDULE. The exterior coating shall be a nominal 2 mil thickness consisting of a topcoat of * * 0.7 to 1.0 mil dry film thickness and the paint manufacturer's recommended primer of * * 0.7 to 1.0 mil thickness, with a combination of primer and top coat not less than 1.7 mil dry film thickness. The exterior color finish shall meet the test requirements specified below.

2.4.1 Cyclic Salt Fog/UV Test

A sample of the sheets shall withstand a cyclic corrosion test for a minimum of 2016 hours in accordance with ASTM D 5894, including the scribe requirement in the test. Immediately upon removal of the panel from the test, the coating shall receive a rating of not less than 10, no blistering, as determined by ASTM D 714; 10, no rusting, as determined by ASTM D 610; and a rating of 6, over 1/16 to 1/8 inch failure at scribe, as determined by ASTM D 1654.

2.4.2 Formability Test

When subjected to testing in accordance with ASTM D 522 Method B, 1/8 inch diameter mandrel, the coating film shall show no evidence of fracturing to the naked eye.

2.4.3 Accelerated Weathering, Chalking Resistance and Color Change

A sample of the sheets shall be tested in accordance with ASTM G 154, test condition UVA-340 lamp, 8h UV at 60 degree C followed by 4h CON at 45 degrees C for at least 360 total hours. The coating shall withstand the weathering test without cracking, peeling, blistering, loss of adhesion of the protective coating, or corrosion of the base metal. Protective coating with an adhesion rating of less than 4B when tested in accordance with ASTM D 3359, Test Method B, shall be considered as an area indicating loss of adhesion. Following the accelerated weathering test, the coating shall have a chalk rating not less than No. 8 in accordance with ASTM D 4214 test procedures, and the color change shall not exceed 5 CIE or Hunter Lab color difference (delta E) units in accordance with ASTM D 2244. * * .

2.4.4 Humidity Test

When subjected to a humidity cabinet test in accordance with ASTM D 2247 for 1000 hours, a scored panel shall show no signs of blistering, cracking, creepage or corrosion.

2.4.5 Impact Resistance

Factory-painted sheet shall withstand direct and reverse impact in accordance with ASTM D 2794 0.500 inch diameter hemispherical head indenter, equal to 1.5 times the metal thickness in mils, expressed in inch-pounds, with no cracking.

2.4.6 Abrasion Resistance Test

When subjected to the falling sand test in accordance with ASTM D 968, Method A, the coating system shall withstand a minimum of 80 liters of sand before the appearance of the base metal. The term "appearance of base metal" refers to the metallic coating on steel base metal.

2.4.7 Specular Gloss

Finished roof surfaces shall have a specular gloss value of 30 plus or minus 5 at 60 degrees when measured in accordance with ASTM D 523.

2.4.8 Pollution Resistance

Coating shall show no visual effects when covered spot tested in a 10 percent hydrochloric acid solution for 24 hours in accordance with ASTM D 1308.

2.5 UNDERLAYMENTS

2.5.1 * *

* *.

2.5.2 Rubberized Underlayment

Rubberized underlayment shall be equal to "Ice and Water Shield" as manufactured by Grace Construction Products, "Winterguard" as manufactured by CertainTeed Corporation, or "Weather Watch Ice and Water Barrier" as manufactured by GAF Building Materials Corporation.

2.5.3 * *

* *.

2.6 INSULATION

Thermal resistance of insulation shall be not less than the R-values shown on the contract drawings. R-values shall be determined at a mean temperature of 75 degrees F in accordance with ASTM C 518. Insulation shall be a standard product with the insulation manufacturer, factory marked or identified with insulation manufacturer's name or trademark and R-value. Identification shall be on individual pieces or individual packages. Blanket insulation shall have a facing as specified in paragraph VAPOR RETARDER. Insulation, including facings, shall have a flame spread not in excess of 25 and a smoke developed rating not in excess of 150 when tested in accordance with ASTM E 84. The stated R-value of the insulation shall be

certified by an independent Registered Professional Engineer if tests are conducted in the insulation manufacturer's laboratory. Contractor shall comply with EPA requirements in accordance with Section 01670 RECYCLED / RECOVERED MATERIALS.

2.6.1 Rigid Board Insulation for Use * * Under a Roof Deck

2.6.1.1 Polyisocyanurate

Polyisocyanurate insulation shall conform to * * the requirements of Specification Section 07214N - Board Insulation.

2.6.1.2 * *

* *.

2.6.1.3 * *

* *.

2.6.2 Blanket Insulation

Blanket insulation shall conform to ASTM C 991.

2.7 INSULATION RETAINERS

Insulation retainers shall be type, size, and design necessary to adequately hold the insulation and to provide a neat appearance. Metallic retaining members shall be nonferrous or have a nonferrous coating. Nonmetallic retaining members, including adhesives used in conjunction with mechanical retainers or at insulation seams, shall have a fire resistance classification not less than that permitted for the insulation.

2.8 * *, CLIPS AND FASTENERS

2.8.1 * *

* *

2.8.2 Clips

Provide manufacturer's standard panel support clips fabricated from zinc- or zinc/aluminum alloy-coated metal compatible with substrates, * * and roof panels. Clips shall be long enough to provide a 2 inch air space between roof panels and underlayment.

2.8.3 Fasteners

Clips * * shall be attached through the metal deck to the structure below with bolts or screws. Where clips * * are attached to the metal deck alone, then bolts (not less than ¼-inch diameter with locking washers and nuts, blind screw-type expandable fasteners (FAB-LOK fasteners as manufactured by Fabco Fastening Systems, or approved equal), blind (pop) rivets (9/32-inch [7mm] diameter, BULB-TITE, as manufactured by Olympic Fastening Systems, Inc., or approved equal) must be used.

2.9 SEALANT

Sealant shall be an elastomeric type containing no oil or asphalt. Exposed sealant shall be colored to match the applicable building color and shall cure to a rubberlike consistency. Sealant placed in the roof panel standing seam ribs shall be provided in accordance with the manufacturer's recommendations.

2.10 GASKETS AND INSULATING COMPOUNDS

Gaskets and insulating compounds shall be nonabsorptive and suitable for insulating contact points of incompatible materials. Insulating compounds shall be nonrunning after drying.

2.11 VAPOR RETARDER

2.11.1 Vapor Retarders as Integral Facing

Insulation facing shall have a permeability of 0.02 perm or less when tested in accordance with ASTM E 96. Facing shall be white or black reinforced polypropylene kraft laminate (PSK). Facings and finishes shall be factory applied.

2.11.2 Vapor Retarders Separate from Insulation

Vapor retarder material shall be polyethylene sheeting conforming to ASTM D 4397. A single ply of 10 mil polyethylene sheet; or, at the Contractor's option, a double ply of 6 mil polyethylene sheet shall be used. A fully compatible polyethylene tape which has equal or better water vapor control characteristics than the vapor retarder material shall be provided. A cloth industrial duct tape in a utility grade shall also be provided to use as needed to protect the vapor retarder from puncturing.

2.11.3 * *

* *.

2.12 ACCESSORIES

2.12.1 Snow Guards

Snow Guards shall be continuous, fabricated of aluminum angles, mechanically clamped to standing seam ribs without penetrating panels or ribs using stainless steel bolts with EPDM washers, stainless steel locknuts, and aluminum clamp plates, as indicated on drawings. Factory finish aluminum components, stainless steel bolts heads and other exposed metal components to match roofing panels.

PART 3 EXECUTION

3.1 INSTALLATION

Installation shall be in accordance with the manufacturer's erection instructions and drawings. Dissimilar materials which are not compatible when contacting each other shall be insulated by means of gaskets or insulating compounds. Improper or mislocated drill holes shall be plugged with an oversize screw fastener and gasketed washer; however, sheets with an excess of such holes or with such holes in critical locations shall not be used. Exposed surfaces and edges shall be kept clean and free from sealant, metal cuttings, hazardous burrs, and other foreign material.

Stained, discolored, or damaged sheets shall be removed from the site.

3.1.1 Roofing

Side laps shall be laid away from the prevailing winds. Side and end lap distances, joint sealing, and fastening and spacing of fasteners shall be in accordance with manufacturer's standard practice. Concealed side Clips shall be spaced from 12 inches on center to a maximum of 16 inches on center as required for the roof location, the wind uplift requirements, and the specific roof system, per manufacturer's recommendations. Install roof panels with a clear air space of 1/2" from the bottom of the panel to the top of the underlayment. Spacing of exposed fasteners shall present an orderly appearance. Side laps and end laps of roof panels and joints at accessories shall be sealed. Fasteners shall be driven normal to the surface. Method of applying joint sealant shall conform to the manufacturer's recommendation to achieve a complete weathertight installation. Accessories shall be fastened into substrate, except as otherwise approved. Closure strips shall be provided as indicated and where necessary to provide weathertight construction.

3.1.2 Field Forming of Roof Panels for Unique Areas

When roofing panels are formed from factory-color-finished steel coils at the Project site, the same care and quality control measures that are taken in shop forming of roofing panels shall be observed. Rollformer shall be operated by the metal roofing manufacturer's approved installer. In cold weather conditions, preheating of the steel coils to be field formed shall be performed as necessary just prior to the rolling operations.

3.1.3 Underlayment

Rubberized Underlayment * * shall be installed * * over the entire plywood roof sheathing on all roofs of all canopies and all buildings. If a roof panel rests directly on the underlayment, a slip sheet shall be installed as a top layer, beneath the metal roofing panels, to prevent adhesion. Slip sheet and installation method shall be as recommended by the roof panel manufacturer. All underlayments shall be installed so that successive strips overlap the next lower strip in shingle fashion. Underlayments shall be installed in accordance with the manufacturer's written instructions. The underlayments shall ensure that any water that penetrates below the metal roofing panels will drain outside of the building envelope.

3.2 INSULATION INSTALLATION

Insulation shall be installed as indicated and in accordance with manufacturer's instructions. Insulation shall be continuous over entire roof surface. Where expansion joints, terminations, and other connections are made, the cavity shall be filled with batt insulation and vapor retarder providing equivalent R-Value and perm rating as remaining insulation.

3.2.1 Board Insulation in Cool Climates

* * Rigid Board Insulation shall be installed as indicated under Specification Section 07214N - Board Insulation. Board Insulation is to be installed under the roof metal deck of the Visitor's Center/Guard Administration Building only.

3.2.2 Blanket Insulation Installation

Blanket Insulation shall be installed in the ceiling cavity and securely attached to the bottom of the roof trusses in the Monitoring Building and the South and East Gate Houses.

3.3 * *
 * *

3.4 VAPOR RETARDER INSTALLATION

3.4.1 Integral Facing on Blanket Insulation

Integral facing on blanket insulation shall have the facing lapped and sealed with a compatible tape to provide a vapor tight membrane.

3.4.2 Polyethylene Vapor Retarder (used only if blanket insulation does not incorporate a vapor retarder)

The polyethylene vapor retarder membrane shall be installed over the entire surface. A fully compatible polyethylene tape shall be used to seal the edges of the sheets to provide a vapor tight membrane. Sheet edges shall be lapped not less than 6 inches. Sufficient material shall be provided to avoid inducing stresses in the sheets due to stretching or binding. All tears or punctures that are visible in the finished surface at any time during the construction process shall be sealed with polyethylene tape.

3.5 ACCESSORY INSTALLATION

3.5.1 Snow Guard Installation

Snow Guards shall be installed level, straight, and properly aligned, mechanically fastened to standing seam ribs without penetrating roof panels or ribs, as indicated on drawings.

3.6 * *
 * *

3.7 Fascia Panels Installation

All Fascia Panels at all roof locations shall be installed vertically regardless of the Eave and/or Rake height/width. Fascia panels may also be installed at 90 degrees to the plane of the roof. Fascia panels installed horizontally or along the direction of the Eave or Rake will not be acceptable. Vertical seams must be watertight, and have uniform appearance. Varying joint spacing will not be acceptable. Install all Fascia Panels in accordance with the Metal Roof Manufacturer=s recommendations, complete with all required trim and flashing accessories for proper appearance, weathertightness, and structural integrity.

3.8 Soffit Panels Installation

All Soffit Panels at all roof location shall be installed at 90 degrees to the plane of the wall. All inside and outside corners shall be mitered. All joints shall be tight and have a uniform appearance. Install Soffit Panels in accordance with the manufacturer=s recommendations.

CONTRACTOR'S FIVE-(5)-YEAR NO PENAL SUM WARRANTY
FOR
NON-STRUCTURAL METAL ROOF SYSTEM

FACILITY DESCRIPTION _____

BUILDING NUMBER: _____

CORPS OF ENGINEERS CONTRACT NUMBER: _____

CONTRACTOR

CONTRACTOR: _____

ADDRESS: _____

POINT OF CONTACT: _____

TELEPHONE NUMBER: _____

OWNER

OWNER: _____

ADDRESS: _____

POINT OF CONTACT: _____

TELEPHONE NUMBER: _____

CONSTRUCTION AGENT

CONSTRUCTION AGENT: _____

ADDRESS: _____

POINT OF CONTACT: _____

TELEPHONE NUMBER: _____

CONTRACTOR'S FIVE (5) YEAR NO PENAL SUM WARRANTY
FOR
NON-STRUCTURAL METAL ROOF SYSTEM
(continued)

THE NON-STRUCTURAL METAL ROOF SYSTEM INSTALLED ON THE ABOVE NAMED BUILDING IS WARRANTED BY _____ FOR A PERIOD OF FIVE (5) YEARS AGAINST WORKMANSHIP AND MATERIAL DEFICIENCIES, WIND DAMAGE, STRUCTURAL FAILURE, AND LEAKAGE. THE NON-STRUCTURAL METAL ROOFING SYSTEM COVERED UNDER THIS WARRANTY SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING: THE ENTIRE ROOFING SYSTEM, MANUFACTURER SUPPLIED FRAMING AND STRUCTURAL MEMBERS, METAL ROOF PANELS, FASTENERS, CONNECTORS, ROOF SECUREMENT COMPONENTS, AND ASSEMBLIES TESTED AND APPROVED IN ACCORDANCE WITH UL 580. IN ADDITION, THE SYSTEM PANEL FINISHES, SLIP SHEET, INSULATION, VAPOR RETARDER, ALL ACCESSORIES, COMPONENTS, AND TRIM AND ALL CONNECTIONS ARE INCLUDED. THIS INCLUDES ROOF PENETRATION ITEMS SUCH AS VENTS, CURBS, SKYLIGHTS; INTERIOR OR EXTERIOR GUTTERS AND DOWNSPOUTS; EAVES, RIDGE, HIP, VALLEY, RAKE, GABLE, WALL, OR OTHER ROOF SYSTEM FLASHINGS INSTALLED AND ANY OTHER COMPONENTS SPECIFIED WITHIN THIS CONTRACT TO PROVIDE A WEATHERTIGHT ROOF SYSTEM; AND ITEMS SPECIFIED IN OTHER SECTIONS OF THE SPECIFICATIONS THAT ARE PART OF THE NON-STRUCTURAL METAL ROOFING SYSTEM.

ALL MATERIAL DEFICIENCIES, WIND DAMAGE, STRUCTURAL FAILURE, AND LEAKAGE ASSOCIATED WITH THE NON-STRUCTURAL METAL ROOF SYSTEM COVERED UNDER THIS WARRANTY SHALL BE REPAIRED AS APPROVED BY THE CONTRACTING OFFICER. THIS WARRANTY SHALL COVER THE ENTIRE COST OF REPAIR OR REPLACEMENT, INCLUDING ALL MATERIAL, LABOR, AND RELATED MARKUPS. THE ABOVE REFERENCED WARRANTY COMMENCED ON THE DATE OF FINAL ACCEPTANCE ON _____ AND WILL REMAIN IN EFFECT FOR STATED DURATION FROM THIS DATE.

SIGNED, DATED, AND NOTARIZED (BY COMPANY PRESIDENT)

(Company President)

(Date)

CONTRACTOR'S FIVE (5) YEAR NO PENAL SUM WARRANTY
FOR
NON-STRUCTURAL METAL ROOFING SYSTEM
(continued)

THE CONTRACTOR SHALL SUPPLEMENT THIS WARRANTY WITH WRITTEN WARRANTIES FROM THE MANUFACTURER AND/OR INSTALLER OF THE NON-STRUCTURAL METAL ROOFING SYSTEM, WHICH SHALL BE SUBMITTED ALONG WITH THE CONTRACTOR'S WARRANTY. HOWEVER, THE CONTRACTOR WILL BE ULTIMATELY RESPONSIBLE FOR THIS WARRANTY AS OUTLINED IN THE SPECIFICATIONS AND AS INDICATED IN THIS WARRANTY EXAMPLE.

EXCLUSIONS FROM COVERAGE

1. NATURAL DISASTERS, ACTS OF GOD (LIGHTNING, FIRE, EXPLOSIONS, SUSTAINED WIND FORCES IN EXCESS OF THE DESIGN CRITERIA, EARTHQUAKES, AND HAIL).
2. ACTS OF NEGLIGENCE OR ABUSE OR MISUSE BY GOVERNMENT OR OTHER PERSONNEL, INCLUDING ACCIDENTS, VANDALISM, CIVIL DISOBEDIENCE, WAR, OR DAMAGE CAUSED BY FALLING OBJECTS.
3. DAMAGE BY STRUCTURAL FAILURE, SETTLEMENT, MOVEMENT, DISTORTION, WARPAGE, OR DISPLACEMENT OF THE BUILDING STRUCTURE OR ALTERATIONS MADE TO THE BUILDING.
4. CORROSION CAUSED BY EXPOSURE TO CORROSIVE CHEMICALS, ASH OR FUMES GENERATED OR RELEASED INSIDE OR OUTSIDE THE BUILDING FROM CHEMICAL PLANTS, FOUNDRIES, PLATING WORKS, KILNS, FERTILIZER FACTORIES, PAPER PLANTS, AND THE LIKE.
5. FAILURE OF ANY PART OF THE NON-STRUCTURAL METAL ROOF DUE TO ACTIONS BY THE OWNER TO INHIBIT FREE DRAINAGE OF WATER FROM THE ROOF AND GUTTERS AND DOWNSPOUTS OR ALLOW PONDING WATER TO COLLECT ON THE ROOF SURFACE. CONTRACTOR'S DESIGN SHALL INSURE FREE DRAINAGE FROM THE ROOF AND NOT ALLOW PONDING WATER.
6. THIS WARRANTY APPLIES TO THE NON-STRUCTURAL METAL ROOFING SYSTEM. IT DOES NOT INCLUDE ANY CONSEQUENTIAL DAMAGE TO THE BUILDING INTERIOR OR CONTENTS WHICH IS COVERED BY THE WARRANTY OF CONSTRUCTION CLAUSE INCLUDED IN THIS CONTRACT.
7. THIS WARRANTY CANNOT BE TRANSFERRED TO ANOTHER OWNER WITHOUT WRITTEN CONSENT OF THE CONTRACTOR; AND THIS WARRANTY AND THE CONTRACT PROVISIONS WILL TAKE PRECEDENCE OVER ANY CONFLICTS WITH STATE STATUTES.

**

CONTRACTOR'S FIVE (5) YEAR NO PENAL SUM WARRANTY
FOR
NON-STRUCTURAL METAL ROOF SYSTEM
(continued)

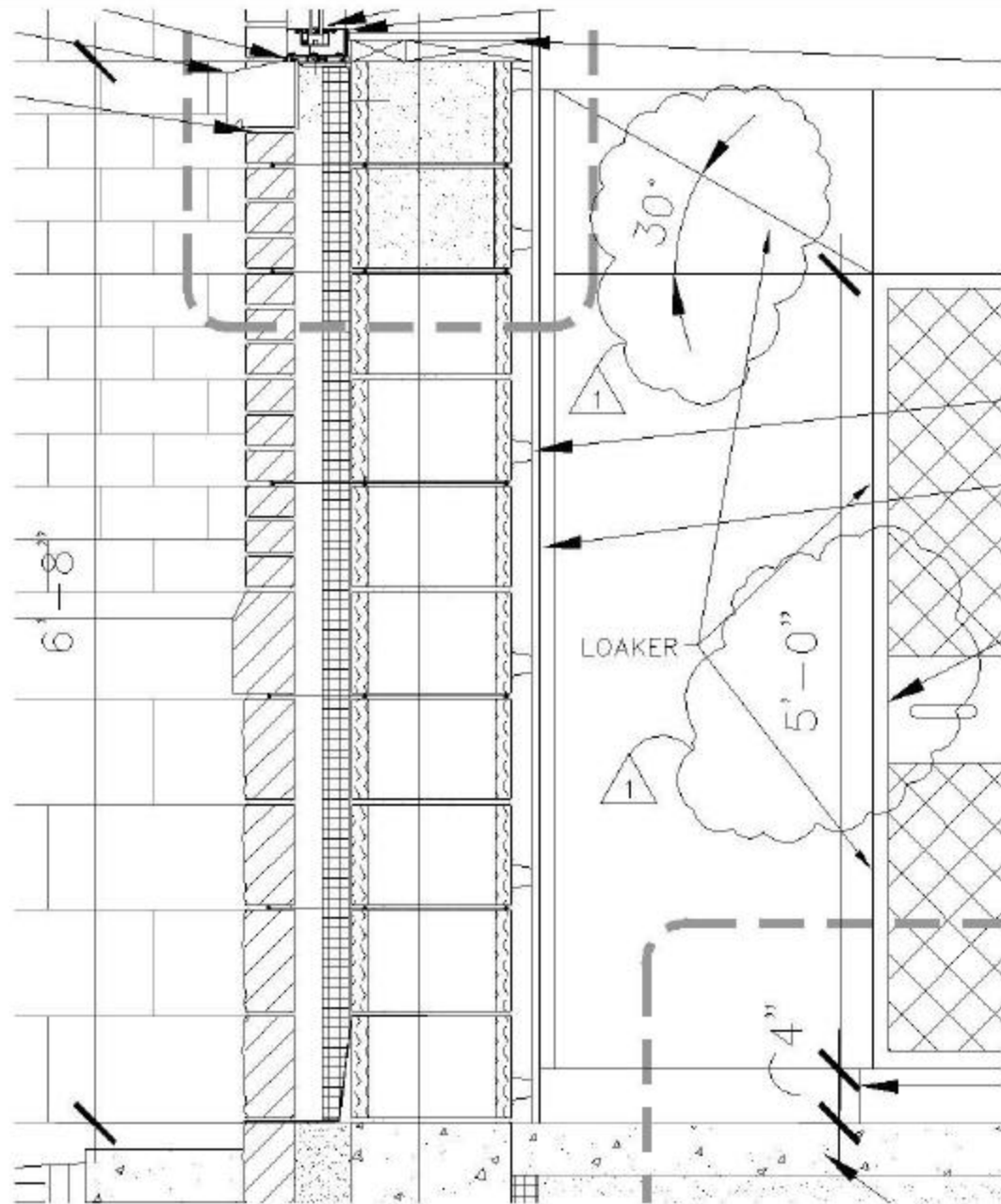
**REPORTS OF LEAKS AND ROOF SYSTEM DEFICIENCIES SHALL BE RESPONDED TO WITHIN 48 HOURS OF RECEIPT OF NOTICE, BY TELEPHONE OR IN WRITING, FROM EITHER THE OWNER OR CONTRACTING OFFICER. EMERGENCY REPAIRS TO PREVENT FURTHER ROOF LEAKS SHALL BE INITIATED IMMEDIATELY; A WRITTEN PLAN SHALL BE SUBMITTED FOR APPROVAL TO REPAIR OR REPLACE THIS ROOF SYSTEM WITHIN SEVEN (7) CALENDAR DAYS. ACTUAL WORK FOR PERMANENT REPAIRS OR REPLACEMENT SHALL BE STARTED WITHIN 30 DAYS AFTER RECEIPT OF NOTICE, AND COMPLETED WITHIN A REASONABLE TIME FRAME. IF THE CONTRACTOR FAILS TO ADEQUATELY RESPOND TO THE WARRANTY PROVISIONS, AS STATED IN THE CONTRACT AND AS CONTAINED HEREIN, THE CONTRACTING OFFICER MAY HAVE THE NON-STRUCTURAL METAL ROOF SYSTEM REPAIRED OR REPLACED BY OTHERS AND CHARGE THE COST TO THE CONTRACTOR.

IN THE EVENT THE CONTRACTOR DISPUTES THE EXISTENCE OF A WARRANTABLE DEFECT, THE CONTRACTOR MAY CHALLENGE THE OWNER'S DEMAND FOR REPAIRS AND/OR REPLACEMENT DIRECTED BY THE OWNER OR CONTRACTING OFFICER EITHER BY REQUESTING A CONTRACTING OFFICER'S DECISION UNDER THE CONTRACT DISPUTES ACT, OR BY REQUESTING THAT AN ARBITRATOR RESOLVE THE ISSUE. THE REQUEST FOR AN ARBITRATOR MUST BE MADE WITHIN 48 HOURS OF BEING NOTIFIED OF THE DISPUTED DEFECTS. UPON BEING INVOKED, THE PARTIES SHALL, WITHIN TEN (10) DAYS, JOINTLY REQUEST A LIST OF FIVE (5) ARBITRATORS FROM THE FEDERAL MEDIATION AND CONCILIATION SERVICE. THE PARTIES SHALL CONFER WITHIN TEN (10) DAYS AFTER RECEIPT OF THE LIST TO SEEK AGREEMENT ON AN ARBITRATOR. IF THE PARTIES CANNOT AGREE ON AN ARBITRATOR, THE CONTRACTING OFFICER AND THE PRESIDENT OF THE CONTRACTOR'S COMPANY WILL STRIKE ONE (1) NAME FROM THE LIST ALTERNATIVELY UNTIL ONE (1) NAME REMAINS. THE REMAINING PERSON SHALL BE THE DULY SELECTED ARBITRATOR. THE COSTS OF THE ARBITRATION, INCLUDING THE ARBITRATOR'S FEE AND EXPENSES, COURT REPORTER, COURTROOM OR SITE SELECTED, ETC., SHALL BE BORNE EQUALLY BETWEEN THE PARTIES. EITHER PARTY DESIRING A COPY OF THE TRANSCRIPT SHALL PAY FOR THE TRANSCRIPT. A HEARING WILL BE HELD AS SOON AS THE PARTIES CAN MUTUALLY AGREE. A WRITTEN ARBITRATOR'S DECISION WILL BE REQUESTED NOT LATER THAN 30 DAYS FOLLOWING THE HEARING. THE DECISION OF THE ARBITRATOR WILL NOT BE BINDING; HOWEVER, IT WILL BE ADMISSIBLE IN ANY SUBSEQUENT APPEAL UNDER THE CONTRACT DISPUTES ACT.

A FRAMED COPY OF THIS WARRANTY SHALL BE POSTED IN THE MECHANICAL ROOM OR OTHER APPROVED LOCATION DURING THE ENTIRE WARRANTY PERIOD.

-- End of Section --

Gossen Livingston Associates, Inc. 420 S. Emporia, Wichita, KS 67202



1 **WALL SECTION**
NO SCALE



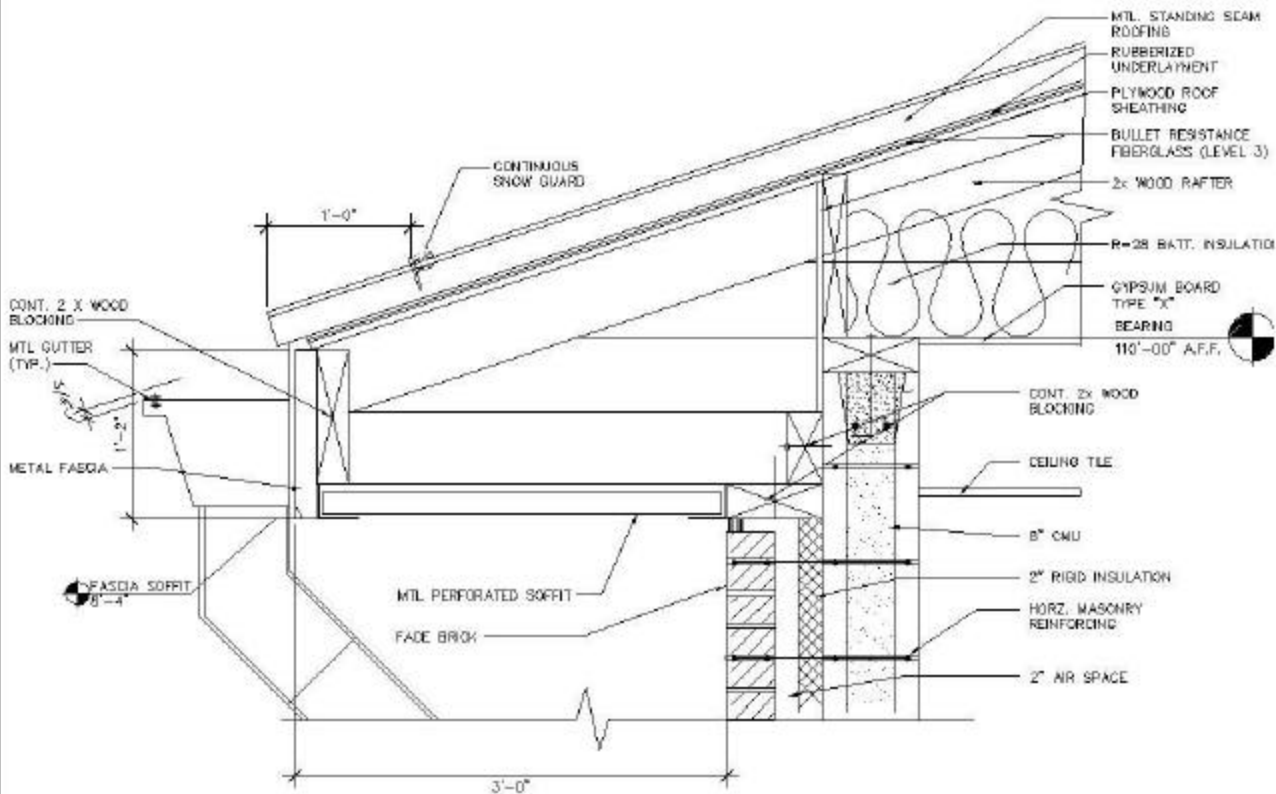
GossenLivingston

Tel: (316) 265-9367
Fax: (316) 265-5848
Email: architects@glal.com

Ref. Doc:	A313
Proj. No:	1012.080
Date:	5-31-03

SHEET TITLE: A313- WALL SECTION VOL. 1		
PROJECT: ACCESS CONTROL FACILITIES		
Drawn By:	DGV	AMED.4
Checked By:	VDR	2 OF 8

Gossen Livingston Associates, Inc. 420 S. Emporia, Wichita, KS 67202



3 EAVE DETAIL 0' 6" 1' 2' 3/4"=1'-0"



GossenLivingston

Tel: (316) 265-9367
Fax: (316) 265-5846
Email: architects@glal.com

Ref. Doc: A521

Proj. No: 1012.080

Date: 5-31-03

SHEET TITLE:

A521- EAVE DETAIL
VOL.1

PROJECT:

ACCESS CONTROL FACILITIES

Drawn By:

DGW

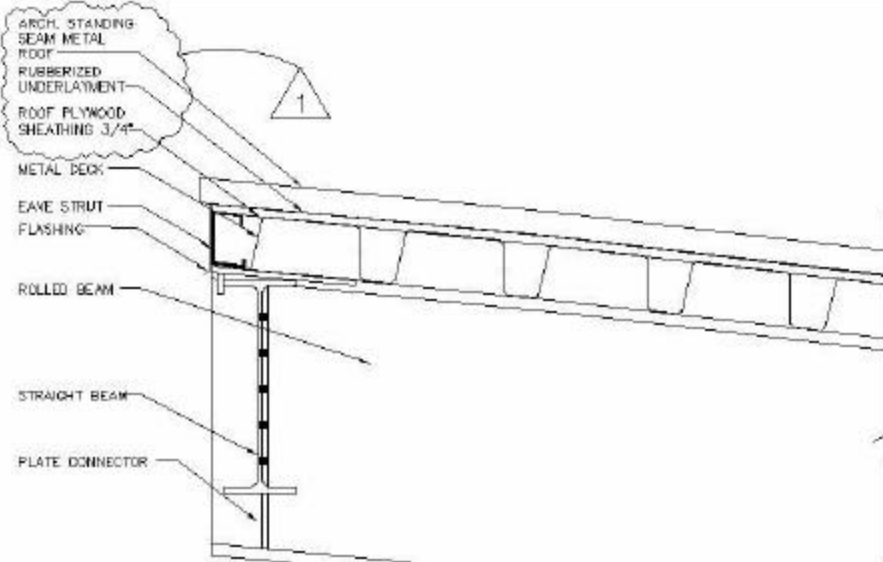
AMED.4

Checked By:

VDR

3 OF 8

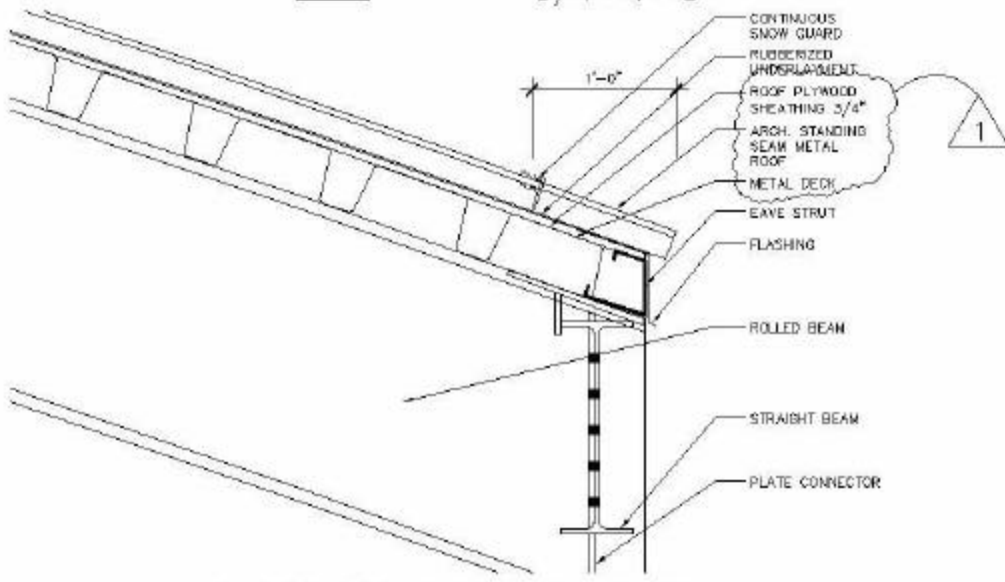
Gossen Livingston Associates, Inc. 420 S. Emporia, Wichita, KS 67202



1

ROOF DETAIL

0' 6" 1' 2' $3/4" = 1'-0"$



3

ROOF DETAIL

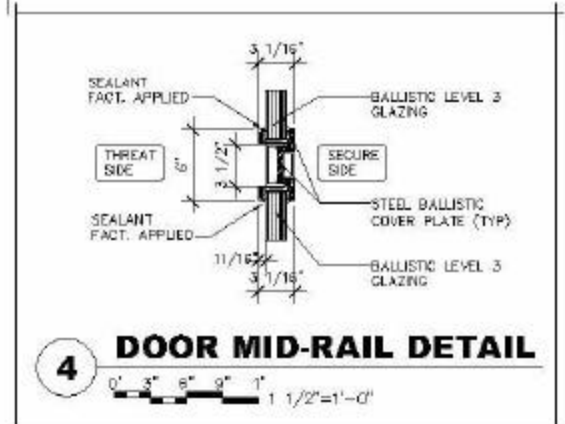
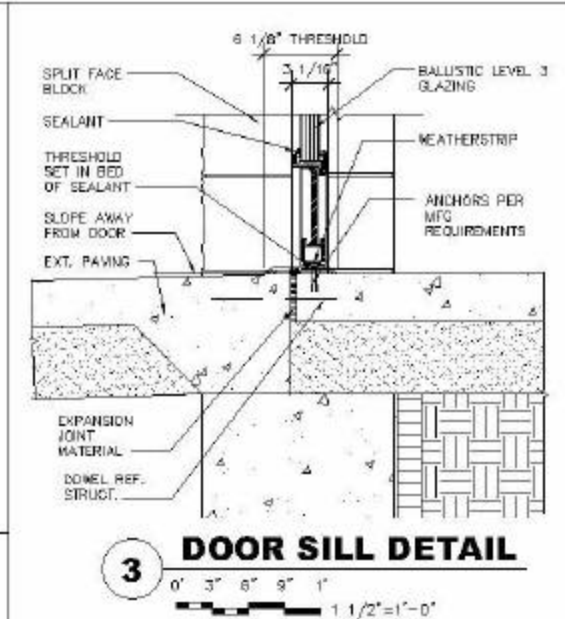
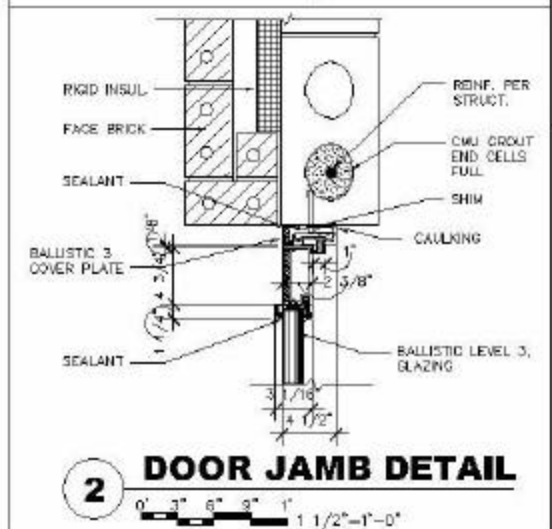
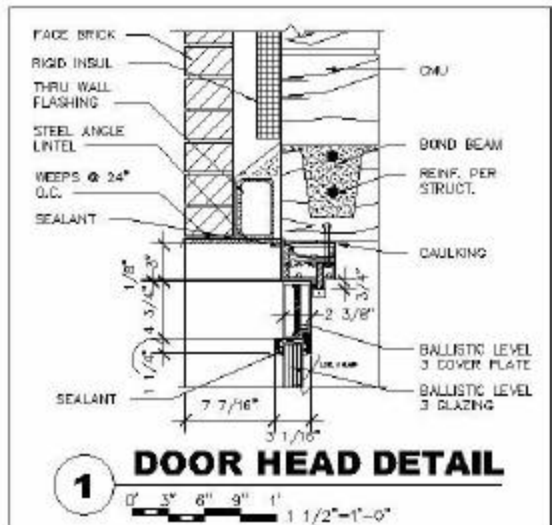
0' 6" 1' 2' $3/4" = 1'-0"$



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 Email: architects@glal.com

Ref. Doc:	A550
Proj. No:	1012.080
Date:	5-30-03

SHEET TITLE:		
A550-MISC. DETAILS TRUCK CANOPY VOL.1		
PROJECT:		
ACCESS CONTROL FACILITIES		
Drawn By:	DGV	AMED.4
Checked By:	VDR	4 OF 8



GossenLivingston

Tel: (316) 265-9367
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Email: architects@glai.com

Ref. Doc: A522

Proj. No: 1012.080

Date: 5-31-03

SHEET TITLE:

A522- MONITORING VOL.1

PROJECT:

ACCESS CONTROL FACILITIES

Drawn By:

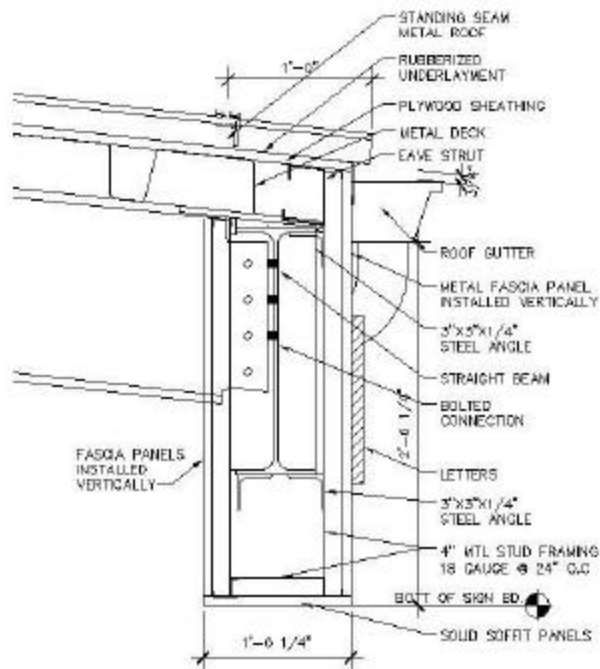
ABO

AMEND 4

Checked By:

VDR

5 OF 8



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Ref. Doc: A570

Proj. No: 1012.080

Date: 5-31-03

SHEET TITLE:

A570- INSP. CANOPY VOL.1

PROJECT:

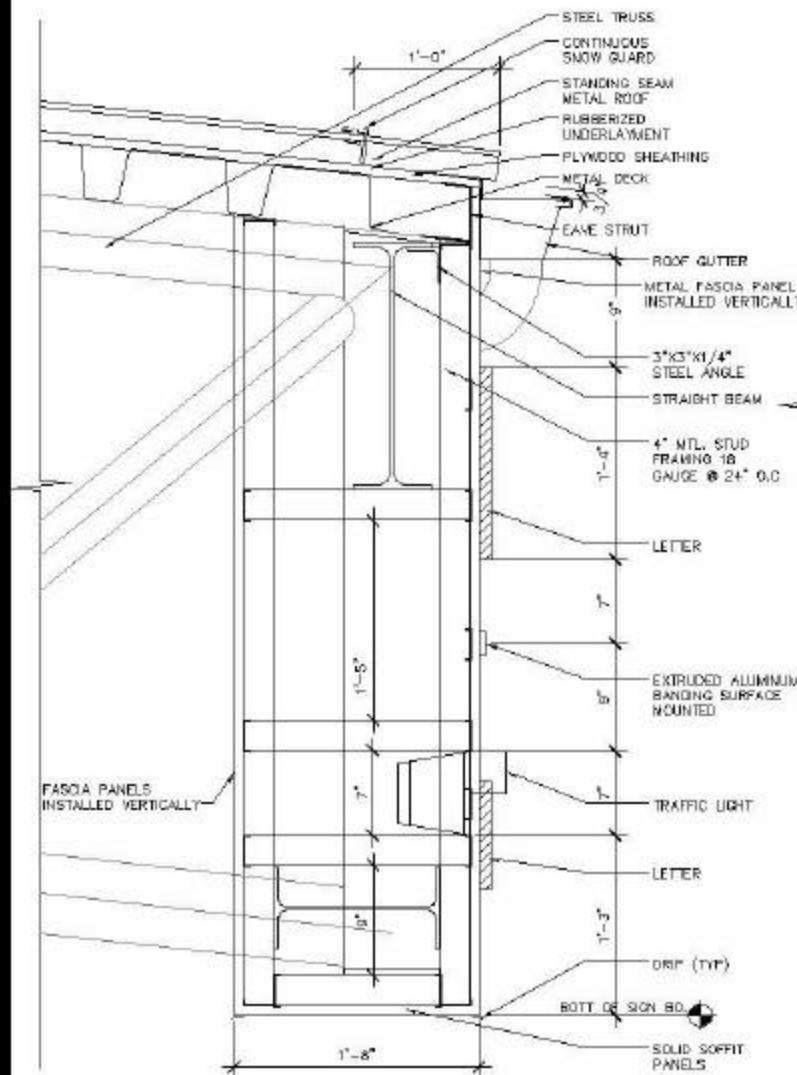
ACCESS CONTROL FACILITIES

Drawn By: ABO

AMEND 4

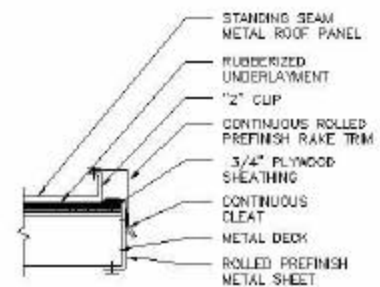
Checked By: VDR

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1 ROOF DETAIL-MAIN CANOPY

0' 3" 6" 9" 1' 1 1/2"=1'-0"



TYPICAL DETAIL CANOPY RAKE

5 0' 3" 6" 9" 1' 1 1/2"=1'-0"



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Ref. Doc: A530

Proj. No: 1012.080

Date: 5-31-03

SHEET TITLE:

A530- MAIN CANOPY VOL.1

PROJECT:

ACCESS CONTROL FACILITIES

Drawn By:

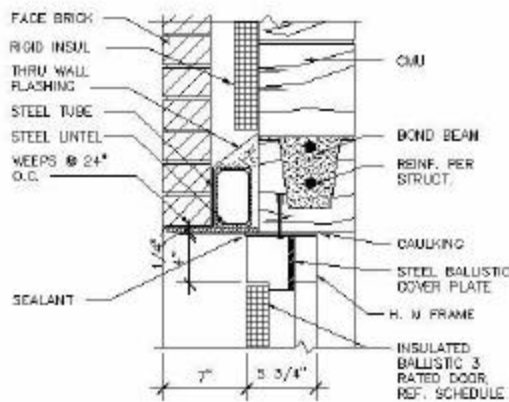
ABO

AMEND 4

Checked By:

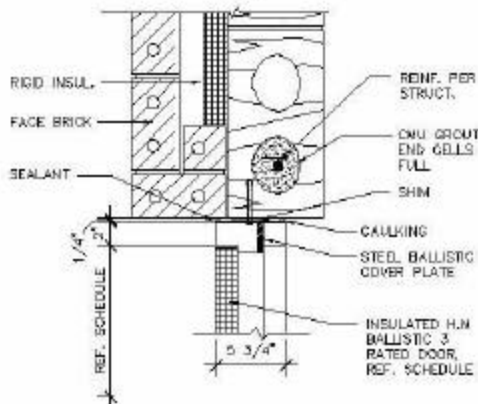
VDR

7 OF 8



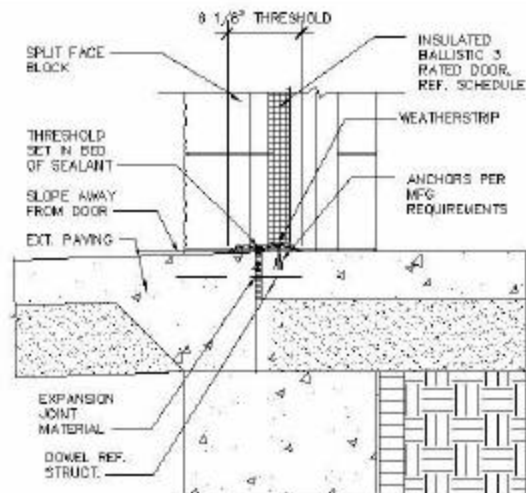
1 DOOR HEAD DETAIL

0' 3' 6' 9' 1' 1 1/2'-1'-0"



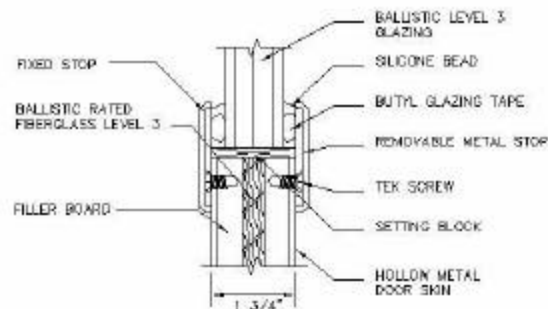
2 DOOR JAMB DETAIL

0' 3' 6' 9' 1' 1 1/2'-1'-0"



3 DOOR SILL DETAIL

0' 3' 6' 9' 1' 1 1/2'-1'-0"



7 DOOR GLAZING DETAIL

0' 1' 2' 3' 6\"/>



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Ref. Doc: A582

Proj. No: 1012.080

Date: 5-31-03

SHEET TITLE:

A582- GATE HOUSE VOL.2

PROJECT:

ACCESS CONTROL FACILITIES

Drawn By:

ABO

AMEND 4

Checked By:

VDR

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